U.S. Department of the Interior
Fish and Wildlife Service
San Pablo Bay National Wildlife Refuge

FINDING OF NO SIGNIFICANT IMPACT

Sonoma Creek Marsh Enhancement Project
San Pablo Bay National Wildlife Refuge

The U.S. Fish and Wildlife Service (Service) and Audubon, CA (Audubon) have proposed to enhance tidal marsh habitat on approximately 300 acres of the greater Sonoma Creek Marsh tidal marsh unit of the San Pablo Bay National Wildlife Refuge (Refuge). Three alternatives, including the no action alternative, were described in the combined Initial Study/Environmental Assessment (IS/EA) Sonoma Creek Marsh Enhancement Project (SFBRWQCB and USFWS 2014) (herein incorporated by reference). The proposed restoration is intended to remedy persistent drainage problems in the Sonoma Creek Marsh by improving the connections between isolated, ponded areas and the adjacent tidal waters of Sonoma Creek/San Pablo Bay, and by improving internal drainage pathways within the marsh. These enhancements are expected to reduce mosquito production and improve habitat conditions to the benefit of marsh-dependent wildlife species.

Decision

Following review and analysis, the Service selected the Proposed Project (Action) for implementation because this alternative best achieves the purpose and need.

Alternatives Considered

The following is a brief description of the alternatives presented in the IS/EA. For a complete description of each alternative, see the IS/EA.

No Action Alternative

Under this alternative, the Service and Audubon would not implement the Sonoma Creek Enhancement Project. The marsh would continue to provide less than optimal conditions for special status species. Over time, large areas of the marsh interior may subside and revert to mudflat, resulting in wetland loss. The marsh would continue to produce high numbers of mosquitoes, requiring regular surveillance and treatment by the Marin/Sonoma Mosquito and Vector Control District. The hydrology of the marsh would continue to be compromised. High levels of mosquito larvicides would continue to be applied for mosquito control.

Proposed Action

The Proposed Project design includes marsh enhancement elements to reduce mosquito production and to enhance marsh and associated upland transitional habitat. Under this alternative we would improve tidal exchange and drainage by constructing a new channel (5,750 linear feet) that would extend into the central basin and connect to San Pablo Bay via lower Sonoma Creek. Central basin enhancements would include approximately 2,400 linear feet of connector channels as well as 2 acres of marsh mounds built from excavated channel material. Under this alternative we would also enhance the existing relic levee berms (abandoned former levees) along the western border of the marsh by creating a 10 acre transition ramp that gradually slopes down from the western levee to the tidal marsh beyond the relic berms, and by creating high marsh lifts in other depressional areas. Details of these enhancement elements are described in the IS/EA.

Reduced Project Alternative

The reduced project alternative represents the minimum version of the project that may be built. The reduced project alternative is the minimum project that can be constructed while still meeting the primary project goals of increasing tidal exchange within the project area to improve habitat conditions for marsh dependent wildlife and reduce mosquito production. However, this alternative would not address the project goal of increasing the amount of marsh-upland transitional habitat in the project area, and the creation of associated high tide refugia for marsh dependent wildlife, roosting/nesting habitat for bird species, and sea-level rise accommodation space.

Under this alternative the Service and Audubon would not construct the Marsh-Upland Transition Ramp, and would reduce the scope and size of the central basin enhancement components, specifically; central tidal channel, lateral starter channels and internal connector channels. Drainage components, such as minor channels, new drainage channels, enhanced drainage channels and high marsh lifts would increase slightly under this alternative.

Effects of Implementation

As described in the IS/EA, implementing the Proposed Project (Action) will have no unavoidable adverse impacts on the environmental resources identified in the IS/EA.

The Proposed Project (Action) is consistent with the purposes for which the Refuge was established and is consistent with objective 3.3 in the San Pablo Bay National Wildlife Refuge Comprehensive Conservation Plan. A brief summary of the potentially adverse effects of implementing the proposed action are provided below. During implementation of the proposed action we will adhere to the Mitigation and Monitoring Reporting Program (Attachment A) to ensure there are no adverse effects to the environment.

Air Quality - Construction-related impacts to air resources would be related to emissions from earthmoving equipment and transportation equipment (trucks) to bring materials to

the project site. These emissions are short-term and we have committed to implementing a dust control plan as described in Attachment A. Therefore the Proposed Action would not have any significant air quality impacts at the individual project level.

Hydrology and Water Quality - It is possible that construction activities may cause short-term, temporary impacts to water quality. Earth-moving and material placement within the marsh could cause increases in suspended sediment concentration and introduce petroleum contaminants (oil, grease, fuel, etc.) into the waters of the Bay. During the period between the completion of earthmoving and vegetation reestablishment, bare graded areas could be subject to erosion from these forces as well. Implementation of mitigation measures described in Attachment A would reduce these impacts to a less than significant level.

The purpose of the project is to improve habitat conditions for marsh-dependent wildlife and reduce mosquito production. This project would reduce the presence of standing water and improve hydrology within the tidal marsh. In addition, the project involves improving and strengthening the Tubbs Island perimeter levee, which would reduce the chances for flooding off-site.

Biological Resources – Implementing the Proposed Action will ultimately restore and enhance habitat for a variety of native species. However, there will be some short-term construction related impacts as described below.

Plants: No special-status plant species have been observed on the project site. However, the site does provide potential habitat for several special status plants. A qualified biologist would survey the site for special status plants before construction. Vegetation directly affected by construction will mostly consist of perennial pickleweed and gumplant, and are expected to re-vegetate within several years after construction.

Birds: Two rail species nest in the project area, and could be affected by construction activities (See T&E Species below). In addition, other nesting birds (mainly scrub nesting birds), including those protected under California Department of Fish and Wildlife Code and/or the Migratory Bird Treaty Act, could be affected by construction activities that occur during the nesting season (typically February –August).

Rail surveys would be conducted pre-construction, and construction would not occur within 700 feet of these individuals. To ensure that scrub nesting birds are not affected, all suitable habitats would be mowed down before commencement of nesting season, the year of construction. This habitat is expected to recover within 5-10 years. Nesting bird surveys will be conducted two weeks before construction, and heavy equipment will be kept out of any areas where nesting birds occur.

Mammals: Harbor seals, which are protected under the Marine Mammal Protection Act, may be subject to short-term, temporary, adverse disturbance impacts during the excavation of the connection of the central tidal channel to Sonoma Creek. Small mammals occur in the project area (see T&E species below). A qualified wildlife

biologist shall be present during the construction of the connection between the central tidal channel and Sonoma Creek to ensure harbor seals are not in the vicinity of the work area. If harbor seals are present, construction activities shall halt until the individuals have vacated the work area.

During construction, a team led by a qualified wildlife biologist shall move in front of construction equipment and flush all animals from the footprints of the access road and enhancement elements by brushing and tapping the vegetation with sticks or brooms. This flushing shall occur no more than 30 minutes prior to construction equipment moving into the impact area. Vegetation shall also be removed from the impact area after animal flushing by either mowing with a string trimmer or scraping with an excavator. These accepted practices prevent marsh mammals and other wildlife from being crushed during construction activities.

Fish: Special-status fish species, including Chinook salmon, steelhead, green sturgeon, longfin smelt, Delta smelt, and tidewater goby, may occur within the project vicinity at various times of the year. These species could be negatively impacted by in-water construction activities through direct physical harm, or through localized increases in turbidity. The construction window would be established in consultation with NMFS and USFWS to avoid impacts to special-status fish. Isolation of the active channel excavation areas, by either deploying a fish screen and/or turbidity curtain or leaving a "plug" at the mouth of the channel, would further reduce potential impacts to fish. The final breaching of this "plug" will occur outside of the special-status fish species migration period.

Wetlands : Implementation of the project would result in both permanent and temporary impacts to federally protected wetlands and waters of the United States. The completed project would result in the net loss of 1.91 acres of jurisdictional wetlands. This loss primarily involves the conversion of wetlands to open water due to the creation of the tidal channel network within the project site and from the construction of the transitional ramp which will convert wetlands to uplands. The uplands created in the transitional ramp are an essential component of a functional tidal marsh system and will improve habitat for several marsh dependent wildlife species by providing refugia during extreme high tides. Temporary impacts to wetlands are limited to those associated with construction of the connection of the central tidal channel to Sonoma Creek where the channel would be excavated through mudflat. This wetland habitat would revegetate quickly. The completed project would enhance over 100 acres of existing wetlands resulting in a net gain in wetland ecosystem function and habitat value to marsh-dependent wildlife species. Therefore, the net loss of 1.91 acres of jurisdictional wetlands is considered a less-than significant impact.

Threatened and Endangered Species: – Two federally endangered species and one state threatened species are known to occur within the project site; the California Ridgway's rail (E), the salt marsh harvest mouse (E) and the California black rail (T). Impacts would be less than significant to these species, with mitigation as outlined in the Biological Opinion for this project (USFWS 2014). As described in the previous section (Biological Resources), rail surveys would be conducted pre-construction to locate all rail

territories. Maps of these locations would be created, distributed to all individuals involved with the project, and no activity would occur within 700 feet of these sites. Additionally, immediately before construction, a team lead by a qualified wildlife biologist would move in front of construction equipment and flush all animals from the footprints of the access road and enhancement elements by brushing and tapping the vegetation with sticks or brooms. This flushing shall occur no more than 30 minutes prior to construction equipment moving into the impact area. Vegetation shall also be removed from the impact area after animal flushing by either mowing with a string trimmer or scraping with an excavator. These practices would prevent marsh mammals and other wildlife from being crushed by construction activities.

Cultural Resources - Because the site was open water of San Pablo Bay until a few decades ago, and only recently filled in as a marsh, archaeological resources are unlikely to occur on the site. Holman & Associates Archaeological Consultants (Holman & Associates) conducted a records search at the Northwest Information Center (NWIC), and found no archaeological resources have been recorded within the project study area (Holman & Associates 2013). Denise Bradley conducted an historic resources evaluation in 2013, as well and found no recorded information regarding historical resources (Bradley 2013).

Geology and Soils - The project would involve the creation of some exposed soil areas (marsh mounds, transitional ramp, high-marsh lift areas, etc.) that would be subject to some wind/wave erosion following construction and prior to vegetation reestablishment. Based on experiences in similar tidal wetland enhancement projects within the Refuge, the amount of erosion of these features would be minimal and would not reduce the effectiveness of the constructed elements.

Construction on the marsh and levees would not drastically alter sub-surface profiles, increase slope heights, or over-steepen slopes, and should therefore not lead to any decreased geologic stability over current conditions. The levee enhancement would involve the placement of excavated material to create thicker, more gently sloping levees, which would strengthen the levee. None of these features would cause any environmental impact or danger to humans or structures. In addition, the grading and site preparation work would be relatively short-term and following construction, disturbed areas that are not subject to rapid passive revegetation, will be planted with native species.

Public Use –There is currently no public use along on the marsh and therefore there is no impact to recreation (see Other Statutory Compliance Requirements section below).

Socioeconomic – Implementation of the project would generate a minor amount of economic activity in the project area. However, because project implementation would occur over a relatively short period (a few months per year over up to 3 years), and because some of the labor would be provided by existing Refuge and District staff, this impact would be minimal. The project would have no long-term social or economic effects.

Environmental Justice – Incorporation of environmental justice principles throughout the planning and decision-making processes implements the principles of NEPA, Title VI of the Civil Rights Act, and the Uniform Relocation Act. The project's potential effects on environmental justice would be negligible, due to having no significant unmitigatable impacts, and would be a small, short-term project with no negative effect on any minority or low-income population.

Cumulative Impacts

The cumulative impacts of the proposed restoration are not significant. Construction activities associated with Sonoma Creek Restoration would overlap with several other restoration projects at the Refuge (Cullinan Ranch, Sears Point and Skaggs Island/Haire Ranch). All of these projects would access their sites via State Route 37. Traffic associated with these projects will be minimal because they involve very little import of materials from off-site. Each of these restoration projects will employ appropriate mitigation to reduce construction related impacts to less than significant. The implementation of all four restoration and enhancement projects will greatly improve the health of the San Pablo Bay and surrounding ecosystem.

Public Availability

The Draft IS/EA was available for public review and comment from January 21st, 2014 through February 22nd, 2014. The document was posted on the Refuge's website and the public was notified of availability through public notices posted in public locations, public notices sent to all stakeholders in the North Bay, and news releases. We received four comment letters. Attachment B contains our response to comments. The Final IS/EA shows all text changes to the public Draft IS/EA text in underline and strikeout format.

Other Statutory Compliance Requirements

Compliance with all statutory requirements is complete. Section 404 Clean Water Act (CWA) permit and Section 10 Rivers and Harbors Act permit authorization was issued by the U.S. Army Corps of Engineers on June 19, 2014 (2014-00175N). Intra-Service Section 7 compliance was completed on June 5, 2014 (81420-2011-F-0774-2). A Biological Evaluation was filed with NOAA/NMFS, and a Letter of Concurrence issued on June 3, 2014 (WCR-2014-665). A Conditional Water Quality Certification in accordance with section 401 of the Clean Water Act was issued by the San Francisco Bay Regional Water Quality Control Board on June 26, 2014 (Reg. Meas. 395727). A final Federal Consistency Determination (CD) is still pending, however the Commission voted unanimously in favor of the Proposed Project on December 4, 2014 (C2014.004.00). In this CD, the USFWS agrees to construct a 1,400 foot spur trail along the levee (Lat 38°7'32.10"N, Long 122°28'20.93"W) separating the Sonoma Baylands unit of the Refuge from the Sears Point unit (currently owned by Sonoma Land Trust). A separate categorical exclusion was completed for construction of this spur trail.

Conclusion

Based on review and evaluation of the information contained in the IS/EA, my finding is the Proposed Project (Action), does not constitute a major federal action significantly affecting the quality of the human environment, within the meaning of section 102(2)(C) of the National Environmental Policy Act of 1969, as amended. As such, an environmental impact statement is not required.

This Finding of No Significant Impact and supporting IS/EA are on file at the U.S. Fish and Wildlife Service, San Pablo Bay National Wildlife Refuge, 2100 Highway 37, Petaluma, California. These documents are available to the public and can be found on the Internet at http://www.fws.gov/refuge/san_pablo_bay. Interested and affected parties will be notified of this decision, and a press release will be issued.

The Service concurs that the Proposed Action should be the selected alternative for restoring and enhancing the Sonoma Creek marsh and will strive to fully execute the Proposed Action. However, as stated in the IS/EA, due to project funding constraints, the project ultimately implemented may fall somewhere between the proposed action and reduced project alternative. This would simply involve a reduction in size and scope of the Central Basin enhancements. However, as described in the IS/EA impact analysis, all environmental impacts of this level of project build-out would be less than, or similar, to those identified for the Proposed Project.

Assistant Regional Director, Refuges
Pacific Southwest Region
U.S. Fish and Wildlife Service

12.16.14
Date

References

Bradley, Denise. April 5, 2013. Historic Resources Evaluation Report Sonoma Creek Enhancement Project, Sonoma County, CA.

Holman and Associates Archaeological Consultants. March 25, 2013. Results of an Archaeological Records Search for Sonoma Creek Enhancement Project, along Tubbs Island in Southeastern Sonoma County within and adjacent to San Pablo Bay National Wildlife Refuge.

San Francisco Bay Regional Water Quality Control Board, and U.S. Fish and Wildlife Service. April 2014. Final Initial Study/Environmental Assessment, Sonoma Creek Marsh Enhancement Project.

U.S. Fish and Wildlife Service. June 5, 2014. Biological Opinion on Implementation of the Proposed San Pablo Bay National Wildlife Refuge Comprehensive Conservation Plan and Mosquito Management Plan at San Pablo Bay National Wildlife Refuge in Sonoma, Napa, and Solano counties, California.

Attachment A – Mitigation Monitoring and Reporting Program, Sonoma Creek Marsh Enhancement Project.

Attachment B – Response to Comments, Initial Study/Environmental Assessment, Sonoma Creek Marsh Enhancement Project.

ATTACHMENT A

MITIGATION MONITORING AND REPORTING PROGRAM

SONOMA CREEK MARSH ENHANCEMENT PROJECT

MITIGATION MONITORING AND REPORTING PROGRAM

SONOMA CREEK MARSH ENHANCEMENT PROJECT

SCH# 2014012043

PREPARED FOR:

California Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
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And

US Fish and Wildlife Service
San Pablo Bay NWR and Marin Islands NWR
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PREPARED BY:

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US Fish and Wildlife Service
Grassetti Environmental Consulting
Wetlands and Water Resources, Inc.

April 2014

MITIGATION MONITORING AND REPORTING PROGRAM
SONOMA CREEK MARSH ENHANCEMENT PROJECT

Mitigation Measure	Implementation Responsibility	Monitoring Method	Timing	Monitoring/ Enforcement Responsibility	Compliance Verification (Initials & Date)
AESTHETICS					
Less than Significant Impact – No mitigation required					
AGRICULTURE AND FOREST RESOURCES					
No Impact – No mitigation required					
AIR QUALITY					
Mitigation III-1. The selected contractor shall implement a dust control plan that shall include the following Basic Construction Mitigation Measures, as recommended by the BAAQMD: • All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day, or as needed. • All haul trucks transporting dry soil, sand, or other loose material off-site shall be covered. • All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day, or as needed. The use of dry power sweeping is prohibited. • All construction equipment shall be cleaned of mud and dirt either at the	Project construction contractor	1. Inform engineers of required mitigation measures. 2. RWQCB mitigation monitor or designee shall perform daily site inspections of adequacy of implementation of control measures during grading and land clearing operations.	Prior to and during construction During construction	USFWS: Implementation RWQCB: Enforcement	

Mitigation Measure	Implementation Responsibility	Monitoring Method	Timing	Monitoring/ Enforcement Responsibility	Compliance Verification (Initials & Date)
project site, or at the selected contractor's facility following the completion of construction. Wheel-washing of construction equipment prior to de-mobilization (off-site transport) may occur, but is not required because all construction equipment shall be transported on flat-bed trucks that will not access the active work area. • All vehicle speeds on unpaved roads shall be limited to 15 mph. • Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points. • Engines in all construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator. • A sign with the telephone number and person to contact at the lead agency regarding dust complaints shall be					

Mitigation Measure	Implementation Responsibility	Monitoring Method	Timing	Monitoring/ Enforcement Responsibility	Compliance Verification (Initials & Date)
posted in a publically visible location. This person shall respond and take corrective action within 48 hours. The BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations.					
BIOLOGICAL RESOURCES					
Mitigation IV-1. Prior to project construction, a qualified botanist shall perform a survey for special-status plant species within the project footprint. The timing of these surveys shall correspond with the blooming period of the target species, when they are most conspicuous and easily identifiable. Any discovered special-status plant occurrences/populations shall be marked in the field (i.e., staked and flagged) and the locations recorded with a GPS. Any special-status plants occurring within the project impact area shall be salvaged for transplanting to a suitable location outside of the impact area.	Project biologist	1. A qualified botanist (e.g., experienced with the local plant species) shall conduct a preconstruction rare plant survey and flag and gps-locate any rare plants. 2. Any special-status plants found within the project impact area shall be salvaged and transplanted to a suitable location outside of the impact area. 3. Applicant shall submit copies of	No more than 14 days prior to construction Prior to construction Prior to construction	USFWS: Implementation RWQCB: Enforcement	

Mitigation Measure	Implementation Responsibility	Monitoring Method	Timing	Monitoring/ Enforcement Responsibility	Compliance Verification (Initials & Date)
		preconstruction surveys and outcomes of any consultation with CDFG.			
Mitigation IV-2. If construction activities are scheduled to occur between January 31 and September 1, the following actions shall occur: 1) Protocol-level surveys for California clapper rail shall be performed by qualified wildlife biologists between January 15th and April 15th. If any clapper rail is detected within the project area, the location will be determined using standard survey protocol (Block and Albertson 2005); No construction activities would occur within 700 ft of the identified rail location prior to September 1. 2) Surveys for nesting birds shall be conducted by qualified wildlife biologists within two weeks of the commencement of construction activities. The purpose of the surveys shall be to determine if active nests or roosts of bird species protected by the MBTA and/or the CDFW Code are present in or within 300 feet (500 feet for raptors) of the construction zone. The surveys	Project biologist	1. A qualified wildlife biologist (with appropriate training in the survey methods) shall conduct the various bird surveys 2. The location of any documented special-status individuals will be established and a species-appropriate buffer around that location delineated (flagged) and mapped with GPS. 3. No construction activities will be permitted within the established buffers until the appropriate avoidance windows	Clapper rail surveys: Jan 15 – Apr 15; Nesting birds: within 14 days of construction Prior to construction Buffers enforced before Sept 1	USFWS: Implementation RWQCB: Enforcement	

Mitigation Measure	Implementation Responsibility	Monitoring Method	Timing	Monitoring/ Enforcement Responsibility	Compliance Verification (Initials & Date)
shall be timed such that the last survey is concluded no more than one week prior to initiation of vegetation clearance or other construction work. If nesting birds are detected during surveys, construction shall be halted until appropriate resource agencies (CDFW, USFWS) have been contacted and appropriate avoidance measures are taken, such as establishing disturbance buffers or halting construction until nests have been vacated. If ground disturbance activities are delayed, then additional pre-construction surveys shall be conducted such that no more than one week will have elapsed between the last survey and the commencement of ground disturbance activities.		expire.			

Mitigation Measure	Implementation Responsibility	Monitoring Method	Timing	Monitoring/ Enforcement Responsibility	Compliance Verification (Initials & Date)
Mitigation Measure IV-3 A qualified wildlife biologist shall be present during the construction of the connection between the central tidal channel and Sonoma Creek to ensure that harbor seals are not in the vicinity of the work area. If harbor seals are present, construction activities shall halt until the individuals have vacated the work area.	Project biologist	1. A qualified wildlife biologist will be present to observe the construction of the connection to Sonoma Creek 2. If harbor seals are noted within the work area, construction will halt until the seals have vacated the area.	During construction During construction	USFWS: Implementation RWQCB: Enforcement	
Mitigation Measure IV-4 During construction, a team lead by a qualified wildlife biologist shall move in front of construction equipment and flush all animals from the footprints of the access road and enhancement elements by brushing and tapping the vegetation with sticks or brooms. This flushing shall occur no more than 30 minutes prior to construction equipment moving into the impact area. If required by USFWS or CDFW, vegetation shall also be removed from the impact area after animal flushing by either mowing with a string trimmer or scraping with	Project biologist and volunteers	1. A qualified wildlife biologist shall lead a team of volunteers that will flush animals from the work area. 2. Vegetation shall be removed from the work area either by mowing with a string trimmer or scraping with an excavator.	30 minutes before construction equipment access 30 minutes before construction equipment access	USFWS: Implementation RWQCB: Enforcement	

Mitigation Measure	Implementation Responsibility	Monitoring Method	Timing	Monitoring/ Enforcement Responsibility	Compliance Verification (Initials & Date)
an excavator. These practices would prevent marsh mammals and other wildlife from being crushed by construction activities.					
CULTURAL RESOURCES					
No Impact – No Mitigation Required					
GEOLOGY & SOILS					
Mitigation Measure: See Mitigation Measure IX-1 in the Hydrology and Water Quality section					
GREENHOUSE GAS EMISSIONS					
Less than Significant Impact – No Mitigation Required					
HAZARDS AND HAZARDOUS MATERIALS					
Less than Significant Impact – No Mitigation Required					
HYDROLOGY AND WATER QUALITY					
Mitigation IX-1. a. Installation of silt fences or straw wattles along the toes of slopes and designated staging areas, and erosion control netting (such as jute) on sloped areas, to minimize soil erosion and prevent sediment from spreading off site.	Project construction contractor	Site inspections by RWQCB or USFWS at start of construction and monthly thereafter	Prior to construction	USFWS: Implementation RWQCB: Enforcement	

Mitigation Measure	Implementation Responsibility	Monitoring Method	Timing	Monitoring/ Enforcement Responsibility	Compliance Verification (Initials & Date)
b. Staging of construction equipment in upland areas on adjacent agricultural lands when not in use and refueling or maintenance of equipment only in upland areas, away from aquatic habitats to prevent the introduction of hazardous chemicals into the water.	Project construction contractor	Site inspections by RWQCB or USFWS at start of construction and monthly thereafter	Prior to and during construction		
c. Training for all contractors working on the site regarding the environmental sensitivity of the project site and surrounding area and the need to minimize impacts.	Audubon	Required attendance/sign-in of on-site workers at training	Prior to start of construction work		
d. Training for all contractors in implementation of stormwater BMPs for protection of water quality.	Audubon/RWQCB	Required attendance/sign-in of on-site workers at training	Prior to start of construction work		
LAND USE AND PLANNING					
No Impact – No Mitigation Required					
MINERAL RESOURCES					
No Impact – No Mitigation Required					
NOISE					
Less than Significant Impact – No Mitigation Required					
POPULATION AND HOUSING					
No Impact – No Mitigation Required					

Mitigation Measure	Implementation Responsibility	Monitoring Method	Timing	Monitoring/ Enforcement Responsibility	Compliance Verification (Initials & Date)
PUBLIC SERVICES					
Less than Significant Impact – No Mitigation Required					
RECREATION					
No Impact – No Mitigation Required					
TRANSPORTATION/TRAFFIC					
Less than Significant Impact – No Mitigation Required					
UTILITIES & SERVICE SYSTEMS					
Less than Significant Impact – No Mitigation Required					

ATTACHMENT B

RESPONSE TO COMMENTS
INITIAL STUDY/ENVIRONMENTAL ASSESSMENT
SONOMA CREEK MARSH ENHANCEMENT PROJECT

RESPONSE TO COMMENTS

INITIAL STUDY/ENVIRONMENTAL ASSESSMENT

SONOMA CREEK MARSH ENHANCEMENT PROJECT

SCH# 2014012043

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April 2014

RESPONSE TO COMMENTS
INITIAL STUDY/ENVIRONMENTAL ASSESSMENT
SONOMA CREEK MARSH ENHANCEMENT PROJECT

Introduction

The purpose of this document is to provide decision-makers with a summary of comments received on the Initial Study/Environmental Assessment (IS/EA) for the Sonoma Creek Marsh Enhancement Project (Project) and to respond to these comments. This document is organized in the following sections:

Section I: Summary of Comments Received
Section II: Response to Comments
Section III: Comment letters

In response to comments, the IS/EA was modified to address comments that required edits to the original document. A Final IS/EA was prepared and is a separate document that accompanies this Response to Comments document and that shows all text changes to the Public Draft IS/EA text in underline/~~strikeout~~ format.

Although comments on the IS/EA resulted in minor corrections, additions, and text deletions, "substantial revisions" (as defined in CEQA) were not made. The Final IS/EA does not identify any new significant impacts or new mitigation measures that would be required to reduce impacts to a less than significant level.

In addition to this Response to Comments document and the Final IS/EA, a Mitigation Monitoring and Reporting Program (MMRP) has been developed for the Project in accordance with CEQA Section 15097 to ensure that mitigation measures that have been imposed on the project to avoid significant environmental effects are properly implemented. The MMRP identifies the entity responsible for implementing mitigation, mitigation timing, and monitoring and enforcement responsibilities. The MMRP accompanies the Final IS/EA and will be provided to the public and decision-makers prior to consideration of project approval.

I. Summary of Comments Received

The IS/EA for the Project was available to the public beginning January 21, 2014. In compliance with CEQA, environmental documents and electronic files were submitted to the State Clearinghouse (SCH # 2014012043). These documents were posted on the US Fish and Wildlife Service (USFWS) San Pablo Bay National Wildlife Refuge (Refuge) internet website and hard copies were available for public review at the Refuge office in Petaluma.

The IS/EA was circulated for a 33 day public review period, from January 21, 2014 to February 22, 2014. At the request of the San Francisco Bay Conservation and Development Commission (BCDC), the comment period was extended to February 28, 2014. During that time the San Francisco Bay Regional Water Quality Control Board (Regional Board) (the CEQA Lead Agency) and USFWS (the NEPA Lead Agency)

received four comment letters, submitted via e-mail and U.S. mail. Comment letters requested additional information on and revisions to some aspects of the project description and impact analyses, indicated additional information that would be required for permit applications for the project, provided suggestions on possible construction methods, and requested that project implementation not interfere with future development of the Bay Trail adjacent to the Project site. Table 1 provides a list of the comment letters, the dates received, and a summary of the comments. While all comments were considered by the Regional Board and the Refuge, not all comments required written responses or resulted in changes to the IS/EA.

Table 1. Summary of Comments Received and Responses

Commenter	Date Received	Summary of Comments
Petaluma River Farms	1/30/2014	Suggested alternate construction methodology from that proposed.
State Lands Commission	2/19/2014	Clarified status of property lease; questions about air quality mitigations; requested additional information regarding mercury contamination and mobilization
San Francisco Bay Trail	2/24/2014	Requested that implementation of the Project will not interfere with future development of the Bay Trail along the Tubbs Island perimeter levee adjacent to the Project site.
San Francisco Bay Conservation and Development Commission	2/28/14	Indicated additional information that will be required for the Project permit application (climate change analysis, public access requirements, bay fill justification, monitoring plan requirements); question about material stockpiling;

No written response is provided for comments that solely express opinion about the project or that raise non-CEQA related issues. Comments that raise issues about potential adverse environmental impacts, or require clarification of elements of the project description are responded to in the Response to Comments section (Section II), below. Comment letters are included in the last portion (Section III) of this document.

II. Response to Comments

As indicated above in Section 1, four comment letters were received on the IS/EA. The comments within each individual letter are identified and addressed below. Any text changes to the IS/EA document resulting from these comments are provided in underline/~~strikeout~~ format in this section, with reference to the specific pages in the Final IS/EA where these changes were made. References for new source documents cited in the revised text have been added to the References section of the Final IS/EA. The Final IS/EA accompanies this Response to Comment document.

Comments from Petaluma River Farm

Comment: *Alternative construction method*

Petaluma River Farms recommends that the project proponents consider using a suction dredge for channel construction, as opposed to excavating equipment. The slurry could be pumped to local containment cells or pumped to Skaggs Island for re-use.

Response: This construction method was considered during the planning process and preliminary cost estimates were developed. However, this method was rejected due to the high projected construction costs, reluctance of the adjacent landowner to allow storage of slurry on agricultural lands, and impracticalities of pumping the slurry to off-site reuse locations (Skaggs Island and Cullinan Ranch).

Comments from the California State Lands Commission

Comment: *Property lease status*

The State Lands Commission (SLC) believes that the Project may be compatible with the operation, management, and maintenance obligations under its existing lease with the USFWS. However, the project has not been authorized by the SLC and may require an amendment to the existing lease.

Response: The SLC reviewed the proposed project in May of 2013 and determined that the project falls within the management activities authorized under the current lease and that no lease amendment will be required. This determination was detailed in a letter from Mary Hays, Public Land Manager, dated May 6, 2013. This letter is available upon request. No substantial changes to the project design have been made since that time.

Comment: *Dust control plan*

The SLC indicates that the "Dust Control Plan" section of the IS/EA needs to indicate the agency responsible for ensuring that the plan is implemented.

Response: The CEQA and NEPA lead agencies (the Regional Board and the Refuge, respectively) will be responsible for ensuring that the dust control plan (and all other mitigation measures identified in the IS/EA) is implemented. This will be indicated in MMRP, which will be included with the CEQA Negative Declaration document.

Comment: *Equipment cleaning/wheel washing*

Mitigation Measure III-1 indicates that "...wheel washing of construction equipment to prevent mud tracking outside the project site would not be required, because all construction equipment that would be used within the marsh would be transported off-site on flat-bed trucks." The SLC requests further details on how the equipment will be cleaned of mud or dirt if it is not removed or cleaned at the site?

Response: The following text has been added to the list of Basic Construction Mitigation Measures provided in Mitigation Measure III-1 on page 51 of the IS/EA:

"All construction equipment shall be cleaned of mud and dirt either at the project site, or at the selected contractor's facility following the completion of construction. Wheel-washing of construction equipment prior to de-mobilization (off-site transport) may occur, but is not required, because all construction equipment shall be transported on flat-bed trucks that will not access the active work area."

The following text has been deleted from Mitigation Measure III-1 on page 52 of the IS/EA:

~~"In addition, wheel-washing of construction equipment to prevent mud tracking outside of the project site would not be required, because all construction equipment that would be used within the marsh would be transported off-site on flatbed trucks. Flatbed trucks would remain on the landward side of the perimeter levee and would not enter the marsh work area."~~

Comment: *Construction-related hazardous materials*

The SLC indicates that the section on Hazards and Hazardous Materials should include a discussion of construction-related activities that might stir up sediments or other pollutants such as mercury and methylmercury that could impact downstream resources. The SLC recommends implementation of avoidance and minimization measures to reduce potential release of toxins from Project-related activities, and development and implementation of monitoring and reporting protocols to inform agencies of the amount of mercury and methylmercury disturbance.

Response: As indicated on pages 81-82 in the IS/EA, preliminary soil sampling and analysis at the project site indicate that typical contaminants of concern (metals [including mercury], polyaromatic hydrocarbons, pesticides, and polychlorinated biphenyls) are found in concentrations below the screening criteria for soil reuse in wetland environments. Therefore, the excavation and movement of marsh soils at the project site would not increase the potential for exposure to any contaminants. Potential impacts of project construction on water quality are addressed in Section IX (Hydrology and Water Quality). The following text is added to item b) under Hazards and Hazardous Materials on page 83 of the IS/EA to cross-reference this discussion.

Development and implementation of a stormwater pollution prevention plan (SWPPP), as described in Mitigation Measure IX-3 in the Hydrology and Water Quality section, would prevent contamination of sensitive habitats by construction-related hazardous materials (fuels, oils, and lubricants). The SWPPP shall require staging of construction equipment in upland areas on adjacent agricultural lands when not in use and refueling or maintenance of equipment only in designated upland areas, away from aquatic habitats to prevent the introduction of hazardous chemicals into the water.

The following changes have been made on page 82 of the IS/EA to provide additional information specific to mercury and methylmercury at the project site. Due to the lack of known mercury contamination at the project site and the anticipated reductions in mercury methylation within Sonoma Creek Marsh following the implementation of the proposed project, no mercury/methylmercury monitoring is proposed.

"Methylmercury (MeHg), an organic form of mercury that is produced by iron- and sulfate-reducing bacteria in anaerobic environments (environments lacking oxygen), is a neurotoxin of concern due to its propensity for biological uptake and bioaccumulation in fish and wildlife and its ability to cause deleterious effects to the nervous system of affected organisms (Heim et al. 2003). There is a large amount of elemental mercury available within the San Francisco Estuary ecosystem due to the presence of abandoned mercury mines in the Coast Range, the historic use of mercury for gold extraction in the Sierra Nevada, and ongoing atmospheric deposition. As indicated above, the results of the preliminary soil sampling did not indicate mercury contamination at the project site. In addition, there are no known point sources of mercury in the Sonoma Creek or Tolay Creek watersheds that would indicate that the project site could be a "hot spot" for mercury in the region.

Wetlands have long been known as producers of MeHg as they can possess the conditions ideal for methylation (shallow water, elevated water temperatures, ample sources of labile carbon, low DO levels, etc.) (Hurley et al., 1995; Rudd, 1995; St. Louis et al. 1994). Hydroperiod (depth, duration, and frequency of inundation) is a key factor in dictating the types of wetland habitats that could produce the most MeHg. Habitats that experience occasional shallow flooding for extended periods of time, such as floodplains, seasonal wetlands, and high-elevation tidal marshes, generally produce

high amounts of MeHg, while tidal marshes that experience more regular tidal inundation tend to have lower MeHg concentrations (Windham-Myers et al. 2010; Siegel et al. 2011; Yee et al. 2008; Alpers et al. 2008). Implementation of the proposed project would be expected to result in an overall reduction in MeHg production within the Marsh by improving tidal exchange within areas that experience prolonged periods of inundation following high tides and storm events."

Comments from San Francisco Bay Trail

Comment: *Bay Trail alignment*

San Francisco Bay Trail indicates that a proposed future alignment of the Bay Trail is situated along the Vallejo Sanitation District levee, immediately adjacent to the proposed project site. It is requested that excavated material placed on the levee for maintenance purposes be placed and graded in such a way as to facilitate future development of this proposed Bay Trail segment.

Response: The placement and rough grading of the levee maintenance material will not preclude future development of the Bay Trail along this levee alignment. This maintenance is needed in order to maintain the integrity of the levee. Segments of this levee may be temporarily impassable for some period of time following material placement until final grading can occur (not part of the proposed project).

Comments from BCDC

Comment: *Public access*

BCDC indicates that some public access will likely be required in any Commission approval of the project. BCDC's preferred public access component for this project would be to provide the Bay Trail alignment along the levee bordering the project. If this access cannot be provided at this time, then the placement of excavated material along the levee should be done should allow for development of the Bay Trail in the future.

Response: The Refuge does not own the adjacent levee and therefore cannot include creation of a trail on the levee as part of the project. However, as noted in the response to San Francisco Bay Trail's comment above, design and implementation of the project and associated levee maintenance activities would not preclude future development of the Bay Trail along this levee.

Comment: *Permit requirements – Bay fill justification*

BCDC indicates that more information is needed to justify why the quantity of proposed fill to construct the marsh mounds and transition ramp constitutes the minimum absolutely necessary to achieve the habitat goals for the marsh. Indicate how the

number and extent of marsh mounds were selected and if a reduced transition zone could achieve the same benefits as the proposed 100-ft wide zone? In addition, the habitat that would be covered, and the habitat that would be anticipated to colonize the filled areas, needs to be fully described.

Response: Fill justification is a required part of the BCDC permit application, and detailed information will be provided in the Project application for the Federal Consistency Determination. The configuration and nature of the enhancement activities proposed at the project site are based in large part on the existing topography and hydrology of the site, and what alterations would need to be made to improve tidal flow and water circulation, and improve habitat conditions. The volume and area of marsh plain that would be subject to fill to create these features is based on the site design that best meets the objectives and budget limitations of the project. Reduced extents of the marsh mounds and transition zone would provide reduced habitat availability and function compared to the proposed design. Over the long term, soil deposition on the project site would greatly improve wetland habitat function and create important marsh-upland transitional habitat for birds and other species seeking refuge during extreme high tides or storm events.

A description of existing habitat conditions within the project area, and specific habitats to be filled (marsh plain and mosquito control ditches) by the construction of marsh mounds and the transitional ramp is provided under the Existing Site Conditions section on page 7 of the IS/EA. Descriptions of the target habitats that would form on the marsh mounds and transitional ramp following construction are provided on pages 13 and 16 respectively.

Comment: *Bay fill for public access*

BCDC asks if some of the material excavated during the project could be used to provide public access or a Bay Trail alignment at the project site.

Response: Construction of a trail or viewing platform within the marsh or transitional areas is not preferred or feasible because (1) it would require additional wetland fill resulting in loss of endangered species habitat, (2) it would increase disturbances to these important habitat areas, and (3) it would not provide public access since there is currently no public access out to the project site itself.

Comment: *Long-term material stockpiling*

BCDC indicates that long-term material stockpiling within wetland areas cannot be authorized within the Commissions Bay jurisdiction and that material should be stockpiled in an upland location until materials can be graded to desired slopes.

Response: In a meeting between the project proponents and BCDC on March 19, 2014, BCDC staff indicated that temporary material stockpiling within Bay jurisdictional

areas would likely be permitted, so long as the stockpiled material can be graded into the enhancement features within two construction seasons following placement (i.e., if the material is placed during the 2014 construction season, it must be graded to final design configuration by the end of the 2015 construction season). The text describing the construction methodology for the transitional ramp feature on page 26 of the IS/EA has been modified as follows:

"The marsh-upland transitional ramp would be constructed from material excavated in creation of the central basin channels. This material would be transported to the ramp construction location via track dump truck, where it would be dumped immediately adjacent to the levee on the existing marsh plain. The material may need to de-water to some extent, which may take anywhere from one week to one year, before it can be contoured into the transitional ramp feature. Once the material has sufficiently dried, it would be graded to final design specifications using an excavator and/or bulldozer. ~~This feature may be built over a period of up to 10 years following completion of the central basin enhancements.~~ If the placed material cannot be contoured to final design specifications within two construction seasons of placement (i.e., material placed during the 2014 construction season must be graded by the end of the 2015 season), it would be stockpiled in upland areas on the landward side of the levee, in areas to be determined in consultation with the landowner and tenant farmer."

Comment: *Monitoring and adaptive management*

BCDC indicates that the Bay Plan policies on tidal marshes and tidal flats require ecosystem restoration projects to include long-term and short-term biological and physical goals, success criteria, and a monitoring program. BCDC indicates that a monitoring program consistent with the size and scope of the project should be developed to evaluate how successful the project is in achieving the desired goals and to inform any needed adaptive management measures should success criteria not be met, or problems develop.

Response: A monitoring program has already been developed to assess the success of the project at meeting stated goals and inform adaptive management decisions. This monitoring program is described in the project Quality Assurance Project Plan (QAPP), which will be provided with all permit applications. Any alterations or additions to this monitoring program will be determined in consultation with the various regulatory agencies during the permitting process.

Comment: *Sea level rise*

BCDC indicates that the Bay Plan tidal marsh policies state that the design and evaluation of any ecosystem restoration project should include an analysis of how the system's adaptive capacity can be enhanced so that it is resilient to sea level rise and climate change. BCDC will require a risk assessment or evaluation based on

projections of mid- and end-of-century sea level rise that analyzes how the proposed project may transition and evolve with rising sea levels.

Response: The requested information regarding project performance relative to current sea-level rise projections will be included in the Project application for the Federal Consistency Determination. The following text has been added to the background discussion in the Hydrology and Water Quality section on pages 86-87 of the IS/EA to describe current sea-level rise estimates and potential effects on tidal wetlands:

"Global sea-level rise has the potential to radically change the hydrology of San Pablo Bay and the project site through increased frequency and duration of inundation. The National Research Council (NRC) estimates that sea levels along the California coast could rise by 5-24" by the year 2050, and by 17-66" by the year 2100 (CO-CAT 2013). Tidal wetlands are able to adapt to sea-level rise, so long as marsh plain sedimentation rates keep pace with rates of sea-level rise and room for landward migration is available (BCDC 2011). If sea-level rise outpaces the rate of marsh plain accretion, high tidal marsh habitat will over time revert to low mash habitat, and eventually mudflat."

The following text has been added to the discussion of item d in the Hydrology and Water Quality section on page 90 of the IS/EA to describe potential impacts of sea level rise upon the proposed Project:

"As indicated in the background section, global sea-level rise has the potential to increase the frequency and duration of flooding on the project site, causing eventual loss of wetland habitat through submergence. Implementation of the proposed project would help to improve the resilience of the marsh to sea-level rise in several ways. The construction of the new channel network throughout the central basin and relic berm area would allow increased import of sediments from San Pablo Bay to the marsh interior. This increased sediment load would increase marsh plain sedimentation rates, thus helping marsh plain elevations keep pace with sea-level rise. In addition, improved tidal exchange within the marsh interior would improve marsh plain vegetation density and health, which would increase the rate of organic material deposition within the marsh, further contributing to marsh plain accretion rates. Construction of the transitional ramp would provide a 10-acre space for gradual marsh migration with sea-level rise. The transitional ramp and marsh mounds in the marsh interior would also provide important refugia for marsh wildlife as extreme high tide events become more common. Construction of the high marsh lifts within the relic berm area would increase marsh elevations within subsided areas, thus making them more resilient to sea-level rise.

Construction of the proposed project would help the Marsh adapt to moderate amounts of sea-level rise. The local suspended sediment concentration within San Pablo Bay is very high due to the presence of extensive offshore mudflats that contain a large

reservoir of material that is readily mobilized by wind waves (Ruhl et al. 2001). Tidal marsh restoration projects in the vicinity have experienced relatively high rates of marsh plain accretion due to these high suspended sediment concentrations (Siegel 2002; Woo et al. 2004). These potentially high sedimentation rates make the Sonoma Creek marsh more likely to adapt to sea-level rise than marshes in more sediment-starved areas of the estuary. It is anticipated that the Sonoma Creek marsh could be resilient under moderate amounts of sea-level rise (15" by 2050; 40" by 2100) following implementation of the project, however it's resilience under higher estimates (24" by 2050; 66" by 2100) is unlikely. These high-end estimates would cause catastrophic changes to the San Francisco Estuary ecosystem."

III. Comment Letters

PETALUMA RIVER FARM
3900 LAKEVILLE HWY
PETALUMA CA. 94954

By: E-mail

To: Mr. Don Brubaker Don_Brubaker@fws.gov
US Fish and Wildlife Service
San Pablo Bay National Wildlife Refuge
7715 Lakeville Hwy
Petaluma Ca. 94954

Re: Draft Initial Study, Environmental Assessment / Sonoma Creek Marsh Enhancement Project

Dear Mr. Brubaker:

Thank you for including us in the review process for the project referenced above. We have reviewed the documentation provided and have the following comments to offer for your consideration.

As a local farming interest with property ties to San Pablo Bay and Petaluma River Wetlands, we believe the Sonoma Creek Marsh Enhancement Project is more than justified, and if successful will become the standard method and long term solution to enhance drainage in the marshes surrounding San Pablo Bay and its tributaries.

Specifically, increased drainage reduces ponding water which will reduce the mosquito population and provide improved habitat for listed species. We also believe that long term spraying of larvicides for mosquito control should be avoided.

Over the last 28 years we have moved thousands of cubic yards of dirt to maintain our levee system. We have both trucked dirt around the farm and also have used a dredge to transport material to offsite drying ponds.

The project proposes to build temporary access roads into the marsh so that an excavator can dig the necessary channels. The excavated material would be loaded into trucks and hauled away to dry, using it later to rebuild the levee system on the ranch. Although this contemporary approach can be accomplished, it is very destructive to the marsh and requires a large number of trucks to accomplish the task. Trucks can only hold about 12 – 14 cubic yards of wet bay material. Just excavating the channel alone (60,000 cy) would require 4,286 truck trips.

Another approach would be to use a small 8 - 12 inch suction dredge to excavate the channels and transfer the material to the nearby ranch where it could be naturally dewatered before rebuilding the levee system. Starting from bayside, the dredge can work its way into the marsh leaving the completed channel "in its wake". The pumped material would be placed into a 40 - 60 acre holding area where drying would take place. In the past, we have successfully been able to rehandle wet

material for levee repair using this size holding area in as little as eight months. An alternative holding area which would require less re-handling of the material would be to pump the material to nearby Skaggs Island, where it could be used to build new wetlands.

A dredge of this size can be operated by a small crew, it will not affect the surrounding wetlands with temporary roads and it will produce far less overall emissions than the excavator / trucking operation listed above. It will also be less expensive and accomplish the job in a shorter amount of time.

We have worked with dredges of this size for many years successfully completing projects balancing environmental needs with "the bottom line"; in 2008 I was awarded the Environmental Stewardship award from NOAA Marine Fisheries Service for new dredge monitoring system which is now used in projects all around the country.

As you move towards a "shovel ready" project I would urge you to explore alternate methods of digging and transporting the excavated channel material using less destructive methods.

Thank you again for allowing us to review the draft proposal, it's good to get off the tractor once and a while.

Sincerely,

Brian Swedberg
Petaluma River Farm
707-592-3104

STATE OF CALIFORNIA
EDMUND G. BROWN JR., *Governor*

CALIFORNIA STATE LANDS COMMISSION
100 Howe Avenue, Suite 100-South
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February 19, 2014

File Ref: SCH# 2014012043

San Francisco Bay Regional Water Quality Control Board
Attn.: Abigail Smith
1515 Clay Street, Suite 1400
Oakland, CA 94612

Subject: **Draft Initial Study/Environmental Assessment (IS/EA) for the Sonoma Creek Marsh Enhancement Project, Sonoma County**

Dear Ms. Smith:

The California State Lands Commission (CSLC) staff has reviewed the subject IS/EA for the Sonoma Creek Marsh Enhancement Project (Project), which is being prepared by the San Francisco Bay Regional Water Quality Control Board (SFBRWQCB). SFRWQCB, as a public agency proposing to carry out a project, is the lead agency under the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.). The CSLC is a trustee agency because of its trust responsibility for projects that could directly or indirectly affect sovereign lands, their accompanying Public Trust resources or uses, and the public easement in navigable waters. Additionally, because the Project potentially involves work on sovereign lands and could affect Public Trust resources, the CSLC may act as a responsible agency if necessary.

CSLC Jurisdiction and Public Trust Lands

The CSLC has jurisdiction and management authority over all ungranted tidelands, submerged lands, and the beds of navigable lakes and waterways. The CSLC also has certain residual and review authority for tidelands and submerged lands legislatively granted in trust to local jurisdictions (Pub. Resources Code, § 6301, 6306). All tidelands and submerged lands, granted or ungranted, as well as navigable lakes and waterways, are subject to the protections of the Common Law Public Trust.

As general background, the State of California acquired sovereign ownership of all tidelands and submerged lands and beds of navigable lakes and waterways upon its admission to the United States in 1850. The State holds these lands for the benefit of all people of the State for statewide Public Trust purposes, which include but are not limited to waterborne commerce, navigation, fisheries, water-related recreation, habitat preservation, and open space. On tidal waterways, the State's sovereign fee ownership

extends landward to the mean high tide line, except for areas of fill or artificial accretion or where the boundary has been fixed by agreement or a court decision. On navigable non-tidal waterways, including lakes, the State holds fee ownership of the bed of the waterway landward to the ordinary low water mark and a Public Trust easement landward to the ordinary high water mark, except where the boundary has been fixed by agreement or a court decision. Such boundaries may not be readily apparent from present day site inspections.

The Project is located waterward of the agreed Ordinary High Water Mark Boundary in Boundary Line Adjustment No. 130 (Tubbs Island Boundary and Exchange Agreement) within ungranted tide and submerged lands in San Pablo Bay and Sonoma Creek. This site is currently under lease (Lease No. PRC 5812.9) to the U.S. Fish and Wildlife Service for management as part of the San Pablo Bay National Wildlife Refuge. CSLC staff believes the proposed Project may be compatible with the operation, management, and maintenance obligations under Lease PRC 5812.9; however, the Project itself has not been authorized by the CSLC and may require an amendment to the existing lease.

These comments are made without prejudice to any future assertion of State ownership or public rights, should circumstances change, or should additional information become available. This letter is not intended, nor should it be construed as a waiver or limitation of any right, title, or interest of the State of California in any lands under its jurisdiction.

Project Description

The U.S. Fish and Wildlife, San Pablo National Wildlife Refuge, is planning to implement the proposed Project to include the modification of the existing marsh unit and include marsh enhancement elements to reduce mosquito production and to enhance marsh and associated upland transitional habitat. These specific enhancement elements are provided separately for the central basin and the relic berm areas of the marsh unit for the proposed Project. The central basin and relic berm area enhancement designs are designed to facilitate expedited drainage for the restoration of naturally developed meandering channels. The extents (length/area) and cut/fill volumes for the various enhancement elements are designed to increase drainage and improve habitat quality.

CSLC Staff Comments

CSLC staff requests that the SFBRWQCB consider the following comments when preparing the Final Mitigated Negative Declaration (MND).

1. **Air Quality** - The "Dust Control Plan" section of the MND lacks sufficient specificity regarding the ultimate responsibility of the plan from an agency jurisdiction. The chosen contractor will be responsible for the Dust Control Plan, but an agency responsible for the assurances of the completion of the plan is not mentioned. It is also stated in the Draft MND Mitigation Measure III-1 that "...wheel-washing of construction equipment to prevent mud tracking outside the project site would not be required, because all construction equipment that would be used within the marsh

would be transported off-site on flat-bed trucks.". How will the equipment be cleaned of mud or other dirt from the marsh if it is not removed or cleaned at the site and subsequently taken off the marsh? Project-related details such as these are not made clear in the IS/EA. Without these details, it is difficult to determine if the Dust Control Plan will be monitored to ensure the potential for movement of marsh mud or dirt off-site from the proposed construction.

2. **Hazardous Materials** - The "Hazards and Hazardous Materials" section, on page 81 of the IS/EA, should also include discussions of construction-related activities on the Project site that might stir up sediment or other pollutants, such as mercury and methylmercury, that could then enter the waterways and impact downstream resources. CSLC staff recommends implementation of avoidance and minimization measures to reduce potential release of toxins from all Project-related activities, and development and implementation of monitoring and reporting protocols to inform agencies of the amount of mercury and methylmercury disturbance.

Thank you for the opportunity to comment on the IS/EA for the Project. As a trustee and responsible agency, the CSLC will need to rely on the Final MND for the issuance of any amended lease as specified above; the information above provides additional description of the CSLC's jurisdiction with respect to the proposed Project.

Please send copies of future Project-related documents, including electronic copies of the Final MND, Mitigation Monitoring and Reporting Program (MMRP), and Notice of Determination (NOD) when they become available, and refer questions concerning environmental review to Christopher Huitt, Senior Environmental Scientist, at (916) 574-2080 or via e-mail at christopher.huitt@slc.ca.gov. For questions concerning CSLC leasing jurisdiction, please contact Johnathan Sampson, Public Land Management Specialist, at (916) 574-0909, or via email at johnathan.sampson@slc.ca.gov.

Sincerely,

Cy R. Oggins, Chief
Division of Environmental Planning
and Management

cc: Office of Planning and Research
Johnathan Sampson, LMD, CSLC
Christopher Huitt, DEPM, CSLC

February 24, 2014

Don Brubaker
SF Bay National Wildlife Refuge Complex
U.S. Fish & Wildlife Service
7715 Lakeville Hwy
Petaluma, CA 94954

Re: Draft IS/EA for the Sonoma Creek Marsh Enhancement Project

Dear Mr. Brubaker:

On behalf of the San Francisco Bay Trail Project, I am writing to submit comments on the U.S. Fish and Wildlife Service's preparation of the above referenced document. The Bay Trail Project is a nonprofit organization administered by the Association of Bay Area Governments (ABAG) that plans, promotes and advocates for the implementation of a continuous 500-mile bicycling and hiking path around San Francisco Bay. When complete, the trail will pass through 47 cities, all nine Bay Area counties, and cross seven toll bridges. To date, slightly more than half the length of the Bay Trail alignment has been developed.

An important goal of the Bay Trail Project is to locate the pathway as close to the shoreline as possible. As you are aware, there are 2.5 miles of existing Bay Trail at Sonoma Baylands, and an additional 2.5 miles under construction as part of the Sears Point Restoration Project that will connect to USFWS headquarters. Paradise Vineyards has long expressed an interest in connecting to the Bay Trail and we look forward to working with them to make this a reality.

Several miles of Bay Trail are also in use from the Tolay Creek Trailhead, and around Tubbs Island. The adopted Bay Trail alignment east of the Tolay/Tubbs segment is along the Vallejo Sanitation District levee, directly adjacent to the proposed Sonoma Creek Marsh Enhancement Project. This alignment is reflected in the Sonoma County Bicycle and Pedestrian Plan adopted in 2010, and in Bay Trail maps available to agencies and the public. This map is attached for your reference.

It is our understanding that material removed from the marsh as part of the project will be placed on the Tubbs Island Perimeter levee. As this is also the alignment for the San Francisco Bay Trail, we are requesting that the